



STATE OF TENNESSEE
COMPTROLLER OF THE TREASURY

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Memorandum

To: Honorable Bill Haslam, Governor
Honorable Tre Hargett, Secretary of State
Honorable Justin P. Wilson, Comptroller of the Treasury
Honorable David H. Lillard, Jr., Treasurer
Commissioner Mark Emkes, Finance and Administration

From: Rachel Newton, Assistant General Counsel, Comptroller of the Treasury

Date: March 19, 2013

Re: Comments on *An Economic Report to the Governor of the State of Tennessee*, UT Center for Business and Economic Research, January 2013.

Pursuant to Tennessee Code Annotated §9-4-5202, the State Funding Board (the Board) shall secure estimates of economic growth from the Tennessee econometric model published by the University of Tennessee's Center for Business and Economic Research (CBER) in its annual Economic Report to the Governor. CBER's report provides an overview of the current estimates of economic growth for the United States and Tennessee. The estimates include data for economic indicators such as nominal personal income, employment, inflation, consumer spending, and the housing market. T.C.A. § 9-4-5202 also requires the Board to comment on the "reasonableness" of CBER's estimate of the rate of growth of Tennessee's economy. For the purposes of this report, the rate of growth for Tennessee's economy is based on the percentage increase in estimated Tennessee personal income, pursuant to T.C.A. § 9-4-5201. The Comptroller's staff assists the Board in determining the reasonableness of the Economic Report by evaluating current economic conditions and trends by utilizing commonly referenced sources in economic forecasting.

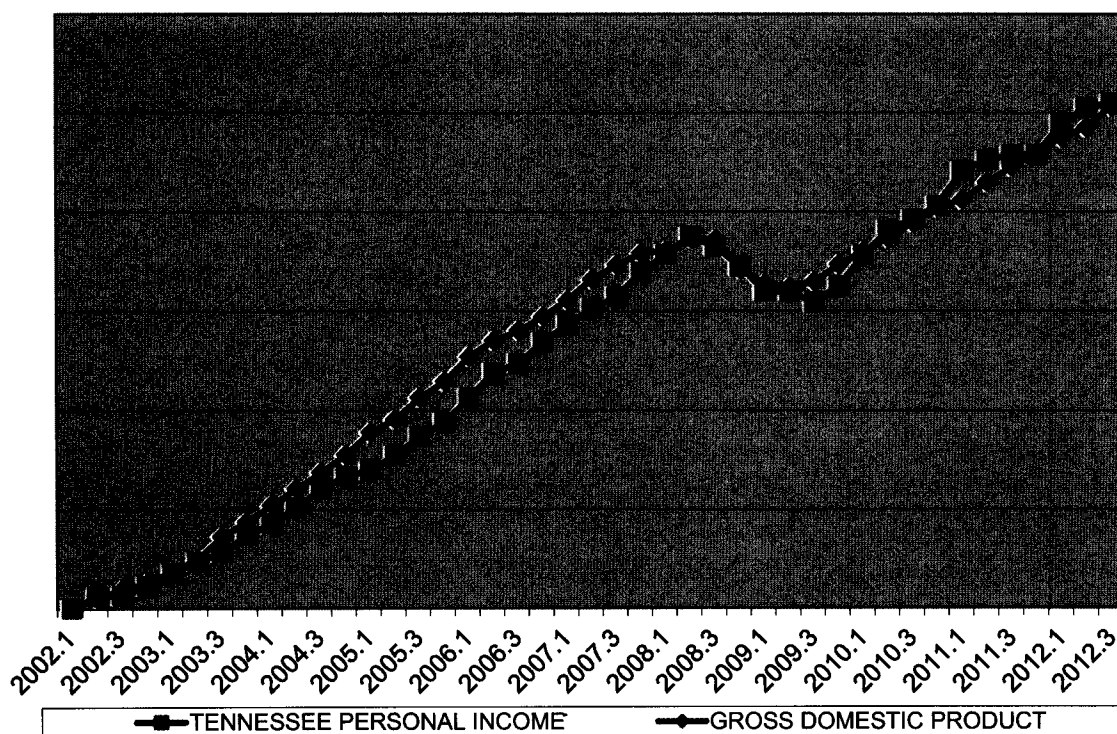
Conclusion: Based on a review of various economic forecasts, trends in the world economy, and historical Tennessee growth, the Economic Report's forecasts for Tennessee nominal personal income growth of 3.57 percent for fiscal year 2013, 3.54 percent for calendar year 2013, and 4.51 percent for calendar year 2014 are not unreasonable.

STAFF COMMENTARY

COMPARISON OF THE ECONOMIC REPORT TO LEADING ECONOMIC FORECASTING SOURCES

Historically, the rate of growth for Tennessee nominal personal income has closely tracked the growth rate for the gross domestic product (GDP) of the nation. Exhibit 1 shows the relationship between the relative growth for Tennessee personal income in comparison to the relative growth for the United States GDP over the past decade.

Exhibit 1: Relative Growth of U.S. GDP and Tennessee Personal Income



Source: United States Bureau of Economic Analysis, www.bea.gov (accessed March 4, 2013).

Because the relationship between the above indicators is closely correlated and few other agencies produce estimates of growth in Tennessee personal income, for the purposes of this commentary, staff will compare the GDP estimates produced by CBER with the GDP estimates produced by other economic forecasting agencies. Given that growth in GDP is expected to be positive, staff expects that growth in Tennessee personal income will be positive as well.

The economy steadily progressed in the first three quarters of 2012, substantially slowing in the fourth quarter to a slight 0.1 percent increase from the third quarter.¹ According to the Bureau of Economic Analysis, the deceleration of the real GDP in the 4th quarter was predominantly reflected in downturns in private inventory investment, in exports, and in federal, state, and local spending.² Going forward into 2013, sequestration and continued uncertainty regarding U.S. fiscal policy may have a dampening effect on consumer spending which could slow GDP growth, although it is not likely that GDP will turn negative.

Exhibit 2 includes data from the Economic Report. Selected indicators forecasting economic growth for the United States and Tennessee are summarized below.

Exhibit 2: Economic Report Forecast Summary – by Calendar Year

Indicator	2013	2014
US Real GDP Growth	1.75%	2.70%
TN Real GDP Growth	2.25%	3.12%
US Nominal Personal Income Growth	1.74%	3.53%
TN Nominal Personal Income Growth	3.54%	4.51%
US Unemployment Rate	7.6%	7.3%
TN Unemployment Rate	7.9%	7.5%
Consumer Price Index	1.44%	1.72%

Source: Matthew N. Murray, et al., UT Center for Business and Economic Research, *An Economic Report to the Governor of the State of Tennessee: The State's Economic Outlook, January 2013*, Table 3.1: Selected U.S. and Tennessee Economic Indicators, Seasonally Adjusted.

¹ Bureau of Economic Analysis, National Income and Product Accounts, Gross Domestic Product, 4th Quarter and Annual, February 28, 2013.

² Ibid.

FORECAST RISKS

Economic forecasts face risks due to uncertainty. Unexpected events or changes in the relationships of underlying explanatory data may decrease a model's ability to provide useful estimates.

These conditions may influence CBER's forecast:

- Consumer spending weakness due to sustained high unemployment rates and the recent raise in the payroll tax.
- Continued uncertainty regarding the European debt crisis.
- United States government budgetary issues, including sequestration.

REAL GDP

The Economic Report forecasts real GDP growth of 1.75 percent for calendar year 2013 and 2.70 percent for calendar year 2014. Leading economic forecasting sources also expect modest growth levels to continue, with 2013 lagging in comparison to the previous year 2012. However, the economy is expected to pick up steam in 2014. Exhibits 3 and 4 compare the Economic Report's forecast with central bank and government forecasts and non-government economists' forecasts.

**Exhibit 3: Central Bank and Government Forecasts:
U.S. Real GDP Growth (%) – by Calendar Year**

Forecaster	CY 2013	CY 2014	Date
Congressional Budget Office	1.4	3.4	February 2013
Fannie Mae	2.0	2.6	February 11, 2013
Freddie Mac	2.5	3.5	February 2013
World Bank	1.9	2.8	January 2013
International Monetary Fund	2.0	3.0	January 23, 2013
Federal Reserve Bank	2.7	3.3	December 12, 2012
High	2.7	3.5	
Median	2.0	3.2	
Low	1.4	2.6	
CBER	1.8	2.7	January, 2013

When compared to the Economic Report's forecast, the median forecasts of the central bank and government economists show a slightly higher rate of increase in real GDP for both calendar years 2013 and 2014. However, the Economic Report's forecasts for both calendar years 2013 and 2014 fall within the range of the comparison sources.

**Exhibit 4: Non-Government Forecasts:
U.S. Real GDP Growth (%) – by Calendar Year**

Forecaster	CY 2013	CY 2014	Date
Bank of America/Merrill Lynch	1.4	2.6	February 22, 2013
The Conference Board	1.6	2.4	February 13, 2013
Wells Fargo	1.7	2.1	February 15, 2013
PNC	1.7	2.7	February 2013
Barclays Capital	1.7	2.5	March 1, 2013
High	1.7	2.7	
Median	1.7	2.5	
Low	1.4	2.1	
CBER	1.8	2.7	January 2013

In comparison to the forecasts of the Economic Report, the median of the non-government forecasts shows a slightly lower rate of real GDP growth for both calendar years 2013 and 2014. Nevertheless, the Economic Report's forecast for growth in real GDP for calendar year 2013 lies close to the range provided by the comparison forecasts. For calendar year 2014, CBERs forecast is at the top end of the range provided by the comparison forecasts.

TENNESSEE NOMINAL PERSONAL INCOME

The Economic Report forecasts growth of 3.54 percent in Tennessee's nominal personal income for calendar year 2013 and 4.51 percent for calendar year 2014. The forecast growth for fiscal year 2013 is 3.57 percent. The revised forecast for calendar year 2012 was 3.79 percent. Exhibit 5 provides a table summarizing the 2013 Economic Reports' forecast year estimates.

Exhibit 5: Estimated Tennessee Personal Income Growth

Forecast Year	Report Year 2013
Fiscal Year 2014	4.27%
Fiscal Year 2013	3.57%
Calendar Year 2014	4.51%
Calendar Year 2013	3.54%
Calendar Year 2012	3.79%

Source: Matthew N. Murray et al., UT Center for Business and Economic Research, *An Economic Report to the Governor of the State of Tennessee: The State's Economic Outlook, January 2013*, Table 3.1: Selected U.S. and Tennessee Economic Indicators, Seasonally Adjusted.

THE DEBT CEILING AND SEQUESTRATION

The Economic Report states that the debt ceiling and sequestration are the “two primary threats to the economy in 2013.”³ In a worst case scenario, if the debt ceiling is not raised, the U.S. Treasury will be left unable to borrow and to pay for debt already incurred. As of the writing of this commentary, there has been no resolution to the debt ceiling issue. However, the Economic report assumes a resolution to raise the debt ceiling, but predicts that the turmoil in Washington will have adverse effects on the economy.

Sequestration went into effect on March 1, 2013, and is a series of across the board spending cuts in a variety of federal programs, including defense and non-defense spending. The Budget Control Act (BCA) of August 2011 mandated that these across the board spending cuts would occur if the joint committee on deficit reduction did not pass a bill to decrease the federal budget deficit. Sequestration was originally designated to go into effect on January 2, 2013, but was delayed until March 1, 2013, by the fiscal cliff deal negotiated between the President and Congress at the end of 2012. The amount of spending cuts for fiscal year 2013 amount to \$85 billion and with similar reductions for fiscal year 2014 and beyond.⁴

Gavyn Davies of the Financial Times notes that “the markets have shown very little sensitivity” to the ongoing fiscal wrangling in Washington and that the fiscal agreements have “done enough to bring the budget deficit and government debt ratios under control for this Presidential term, thus reducing the risk of a fiscal crisis in the immediate future.”⁵ However,

³ CBER, *Economic Report to the Governor*, 2013, p. 12.

⁴ UBS, “US Economic Perspectives,” February 22, 2013, p.3.

⁵ Gavyn Davies, “The U.S. Economy After Sequestration,” Financial Times, March 3, 2013, <http://blogs.ft.com/gavyndavies/2013/03/03/the-us-economy-after-sequestration/>.

Federal Reserve Chairman Ben Bernanke told Congress the sequestration could result in a 0.5 percentage point cut to economic growth.⁶ Despite the large spending cuts resulting from sequestration, the Economic Report notes a number of positive signs for the economy, many of which are discussed below.

HOUSING MARKET

The fiscal crisis leading to the recent recession resulted primarily from the housing market meltdown and subsequent turmoil in the financial markets. The Economic Report notes that the national housing market finally began to show “broadly positive signs” in 2012 and is expected to continue growing in 2013. CBER notes that housing starts are increasing and the housing price index is growing. The construction sector also improved in 2012 and is expected to keep improving in 2013 with respect to job creation, housing starts and new home sales.

Goldman Sachs economist Kris Dawsey is also hopeful about the housing sector in 2013 and beyond. He forecasts “14% real residential investment growth and a roughly 3% gain in home prices... of this boost, residential construction activity should add about 0.3 percentage points [to real GDP growth], similar to the contribution seen [in 2012].”⁷

Sales of new homes in January 2013 were up 28.9 percent from one year ago, to a seasonally adjusted annual rate of 437,000, according to the U.S. Census Bureau and the U.S. Department of Housing and Urban Development.⁸ Similarly, sales of existing homes rose in January of 2013, and for the past 21 months have been at above year-ago numbers, according to the National Association of Realtors. The Pending Home Sales Index, which is based on the number of contract signings for existing homes, increased 9.5 percent in January 2013 over the January of 2012 level.⁹

CONSUMER SPENDING

The largest component of total GDP is consumer spending, accounting for approximately two-thirds of total output. The Economic Report forecasts that growth in consumer spending in 2013 will be slightly below the growth rate recorded in 2012. The forecast is for a 1.8 percent

⁶ PBS Newshour, “Fed Chair Bernanke Warns Lawmakers Sequester Could Slow Economic Recovery,” February 26, 2013, http://www.pbs.org/newshour/bb/business/jan-june13/sequester_02-26.html

⁷ Kris Dawsey, Goldman Sachs Economic, Commodities and Strategy Research, “Boost But No Boom,” February 13, 2013, p.6.

⁸ U.S. Census Bureau News, U.S. Department of Housing and Urban Development, Joint Release “New Residential Sales in January 2013,” February 26, 2013, <http://www.census.gov/construction/nrs/pdf/newressales.pdf>

⁹ National Association of Realtors, “January Pending Home Sales Up in All Regions,” February 27, 2013, <http://www.realtor.org/news-releases/2013/02/january-pending-home-sales-up-in-all-regions>

increase in consumption expenditures in 2013, compared to 1.9 percent in 2012.

The Economic Report notes that "although consumer sentiment is at its highest since the financial crisis, a series of factors continue to hold back spending."¹⁰ These factors include lingering consumer caution due to high debt burdens, soft employment growth, household net worth losses sustained during the financial crisis, and uncertainty about the future of the national economy and federal fiscal policy. The Economic Report also predicts that "the expiration of the payroll tax [in January of 2013, which effectively resulted in a 2 percent tax increase on an individual's first \$113,700 of annual earnings] will have serious impacts on savings and consumer spending in 2013."¹¹ Consumer spending will be slower in the first quarter of 2013 at 1.4 percent, with a modest increase for the rest of the year around 2 percent.

The minutes of the U.S. Federal Open Market Committee meeting from January 29-30, 2013 note mixed sentiment about the growth of consumer spending in 2013:

Some participants stated that low interest rates appeared to be contributing to strong sales of autos or, more generally, consumer durables. It was also noted that continued deleveraging by households was improving [consumer] financial positions, which would likely support increased spending. Holiday shopping reportedly was relatively solid, and, reflecting the improvement in the housing market, demand for home furnishing and construction materials was up. However, some participants were concerned that the recent increase in the payroll tax could have a significant negative effect on spending.¹²

Despite continued consumer uncertainty, retail and food service sales increased 1.1 percent for February 2013 over the previous month to a seasonally adjusted number of \$421.4 billion, according to the U.S. Census Bureau and U.S. Department of Commerce.¹³ This figure is up 4.6 percent from a year ago. Retail sales are a key component of consumer spending and positive growth in this area may be able to offset concerns about reduced consumer spending due to the expiration of the payroll tax.

¹⁰ CBER, *Economic Report to the Governor*, January 2013, p. 13.

¹¹ Ibid.

¹² Minutes of the Federal Open Market Committee, January 29-30, 2013, p. 11.

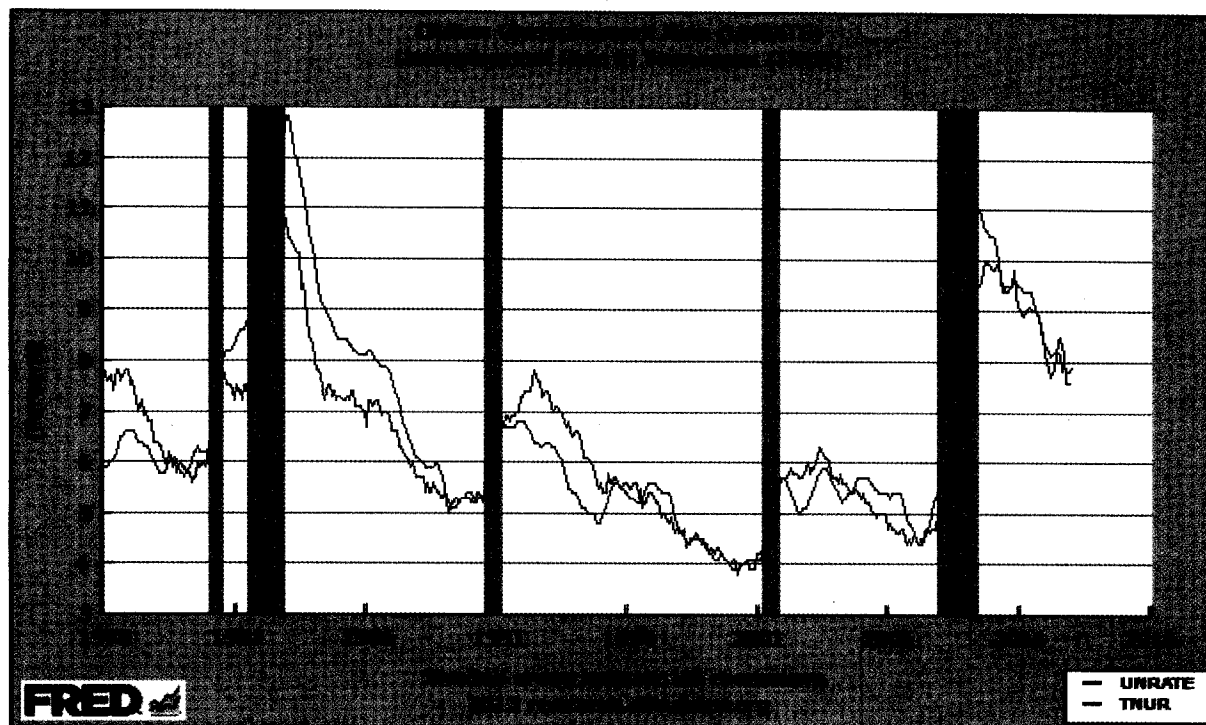
¹³ U.S. Census Bureau, U.S. Department of Commerce, "Advance Monthly Sales for Retail and Food Services February 2013," March 13, 2013, http://www.census.gov/retail/marts/www/marts_current.pdf.

UNEMPLOYMENT

Current Conditions and Forecasts

Since 2009, Tennessee unemployment has been at its highest annual levels since 1982, when the annual unemployment rate reached 11.7 percent. For the most part, Tennessee's unemployment rate has been higher than the national rate since the beginning of the recession in December 2007. Exhibit 6 shows a comparison of national and state unemployment rates from the Federal Reserve Bank of St. Louis.

Exhibit 6: Federal Reserve Bank of St. Louis: Unemployment Rate Comparison



Source: Federal Reserve Bank of St. Louis, <http://www.stlouisfed.org/> (accessed March 6, 2013).

According to the latest data from the Tennessee Department of Labor and Workforce, the Tennessee unemployment rate for January 2013 was 7.7 percent, its lowest since 2008. The United States unemployment rate was 7.9 percent in January 2013, according to the Bureau of Labor Statistics.¹⁴

The Economic Report forecasts that the employment outlook for Tennessee and the nation “should improve in the early quarters of 2013 before yielding a stronger trend late in the year and

¹⁴ The Tennessee unemployment rate as published by the U.S. Bureau of Labor statistics will not be released until March 18, 2013 and is therefore unavailable for this commentary.

in 2014.”¹⁵ Tennessee’s unemployment rate will track closely with the U.S. unemployment rate in the next couple of years. For 2013, the Economic Report estimates a 7.9 percent unemployment rate for Tennessee, compared to a U.S. rate of 7.6 percent. The 2014 forecast displays 7.5 percent unemployment in Tennessee, while the U.S. estimate is 7.3 percent.¹⁶

CBER expects the economy to add more jobs in 2013 than in 2012 but forecasts that added job growth will not have as much of an impact on the unemployment rate as it did in 2012. This is because much of the decline in the unemployment rate resulted from discouraged workers exiting the labor force.¹⁷ According to the Economic Report, the national rate of unemployment is expected to remain at or above 7 percent until 2015. In short, the Economic Report forecasts that although unemployment rates for the U.S. and Tennessee are expected to decline over the next few years, the rates will remain at pre-recession levels over the long term.

Kiplinger’s forecast is also cautiously optimistic, predicting that job gains in 2013 should be similar to the 181,000 jobs per month that were added in 2012 and that the unemployment rate should drop to 7.5 percent by the end of 2013. However, it is too early to determine what effect, if any, the expiration of the payroll tax in January of 2013 will have on the labor market. Since the increase in payroll tax creates higher costs for labor, it may have a dampening effect on employer hiring.¹⁸

Labor Force and Utilization

The unemployment rate can be deceptive because it measures the percentage of the labor force that is actively seeking employment. The labor force does not include unemployed people who are not looking for jobs. Therefore, the unemployment rate can be over or under estimated depending on the number of individuals who enter or exit the labor force due to their perceptions of succeeding in the search for employment. The Tennessee civilian labor force decreased in size during 2012 by 0.61 percent.

Exhibit 7 below shows recent estimates from the U.S. Bureau of Labor Statistics for Tennessee.

¹⁵ CBER, *An Economic Report to the Governor*, 2013, p. 30.

¹⁶ Ibid., p. 53.

¹⁷ Ibid., p. 14.

¹⁸ Kiplinger’s Economic Outlook, February 4, 2013, <http://www.kiplinger.com/tool/business/T019-S000-kiplinger-s-economic-outlooks/>.

Exhibit 7: Annual Tennessee Employment, Unemployment, and Labor Force Information

Year	Period	Labor force	Employment	Unemployment	Unemployment Rate (%)	Labor Force Growth (%)
2003	Annual	2,998,595	2,734,344	164,251	5.7	0.72%
2004	Annual	2,909,018	2,750,754	158,265	5.4	0.36%
2005	Annual	2,942,585	2,779,121	163,463	5.6	1.15%
2006	Annual	3,008,978	2,852,178	156,800	5.2	2.26%
2007 (F)	Annual	3,047,811	2,902,175	145,636	4.8	1.29%
2008 (F)	Annual	3,058,652	2,855,240	203,412	6.7	0.36%
2009 (F)	Annual	3,034,758	2,716,855	317,903	10.5	-0.78%
2010 (B)	Annual	3,084,169	2,783,434	300,734	9.8	1.64%
2011 (B)	Annual	3,132,470	2,844,578	287,892	9.3	1.57%
2012 (B)	Annual	3,113,376	2,864,184	249,192	8.0	-0.61%

Note: (F) Reflects model reestimation and new seasonal adjustment., (B) Reflects revised population controls, model reestimation, and new seasonal adjustment.

Source: U.S. Bureau of Labor Statistics (seasonally adjusted), (accessed March 8, 2013).

EUROPEAN DEBT CRISIS

This year, the Economic Report predicts that the recession in the Eurozone is expected to last into 2013, and notes that many economists think the crisis in Europe is still one of the biggest threats to the U.S. Economy. The crisis threatens the U.S. Economy in various ways. Since the U.S. economic crisis hit, the U.S. financial sector has become more stable through bailouts and stricter regulations. Nevertheless, U.S. banks lack the same stability in many European countries due to the complex nature of the global financial system – if there is a panic in one market, it can easily spill over to another. On a brighter note, the Economic Report states that “significant progress was made in 2012 as the European Central Bank (ECB) and the International Monetary Fund (IMF) stepped in with plans to buy euro-area government bonds.”¹⁹

Goldman Sachs Chief Economist Jan Hatzius notes that for 2013, the risk of spillovers from Europe to the rest of the world is lessened from that of 2012. The crisis is far from being resolved, particularly with respect to the peripheral economies and European labor markets, but the actions of the European Central Bank have “built up a little bit of a safety net.”²⁰

¹⁹ CBER, *Economic Report to the Governor*, 2013, p. 16.

²⁰ Jan Hatzius, Goldman Sachs, *2013 Global Economic Forecast* (video), December 2012, http://www.goldmansachs.com/our-thinking/focus-on/outlook/hatzius-2013/index.html?cid=PS_01_20_06_00_00_00_01_a

INFLATION

The Economic Report forecasts inflation to stay in check, growing at a slower pace in 2013 than in the previous two years. Headline consumer price index (CPI) inflation is estimated to be 1.4 percent for 2013 and 1.7 percent for 2014, following 2.1 percent in 2012 and 3.1 percent in 2011.

The minutes of the Federal Open Market Committee meeting on January 29-30, 2013 note that “the staff’s forecast for inflation was little changed from that prepared for the December FOMC meeting. The staff continued to project that inflation would be subdued through 2015.”²¹ With longer-term inflation expected to remaining stable, almost all of the meeting participants expected that that inflation would remain at or below 2 percent for the coming quarters.²²

CONCLUSION

Based on this review, the Economic Report’s forecast for Tennessee nominal personal income growth of 3.57 percent for fiscal year 2013, 3.54 percent for calendar year 2013, and 4.51 percent for calendar year 2014 is not unreasonable.

²¹ Minutes of the Federal Open Market Committee Meeting, January 29-30, 2013, p.11.

²² Ibid.